OCT 3 0 2003

102

COUNT DIGITAL VIDEO DISPLAY UNITS WHOSE IMAGE OUTPUTS
WILL BE SPATIALLY COMPOSITED BY A COMPOSITOR

104

CHOOSE A TILE PATTERN FROM THE TILE PATTERN LIBRARY
WHEREIN AN AMOUNT OF TILES IN THE CHOSEN TILE PATTERN EQUALS
THE COUNTED DIGITAL VIDEO DISPLAY UNITS

106

CREATE A COMPOSITING WINDOW WITHIN A DISPLAY AREA OF THE COMPOSITOR
WHEREIN A SHAPE OF THE CREATED COMPOSITING WINDOW
MATCHES A SHAPE OF A PERIPHERY OF THE CHOSEN TILE PATTERN AND
WHEREIN THE CREATED COMPOSITING WINDOW
IS FORMED BY PIXELS WITHIN THE DISPLAY AREA

108

DECOMPOSE THE CREATED COMPOSITING WINDOW INTO A NUMBER OF TILES,
WHEREIN THE NUMBER IS EQUALS
THE AMOUNT OF TILES IN THE CHOSEN TILE PATTERN,
WHEREIN A SHAPE AND A POSITION OF EACH OF THE TILES MATCHES
A SHAPE AND A POSITION OF A CORRESPONDING TILE IN THE CHOSEN TILE PATTERN,
AND WHEREIN EACH OF THE TILES IS FORMED BY PIXELS WITHIN THE DISPLAY AREA

110

COMMUNICATED, TO THE COMPOSITOR,
THE PARAMETERS THAT DEFINE THE COMPOSITING WINDOW AND
THE PARAMETERS THAT DEFINE EACH OF THE TILES

112

ASSIGN EACH OF THE TILES TO A CORRESPONDING DIGITAL VIDEO DISPLAY UNIT

114

RECEIVE, AT EACH OF THE TILES,
AN IMAGE OUTPUT OF THE ASSIGNED CORRESPONDING DIGITAL VIDEO DISPLAY UNIT,
THEREBY SPATIALLY COMPOSITING DIGITAL VIDEO IMAGES
WITH A TILE PATTERN LIBRARY

FIG.1

FIG.2

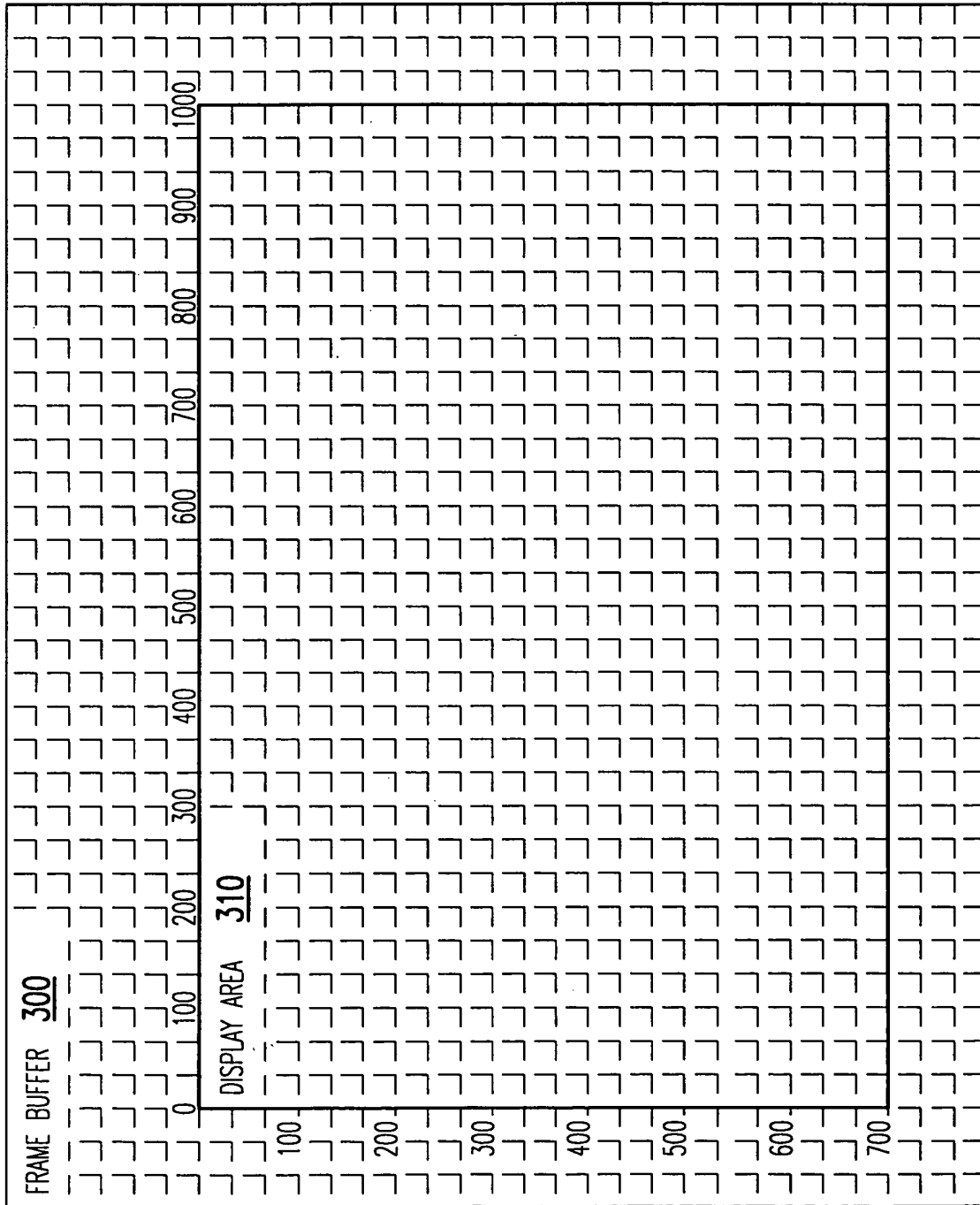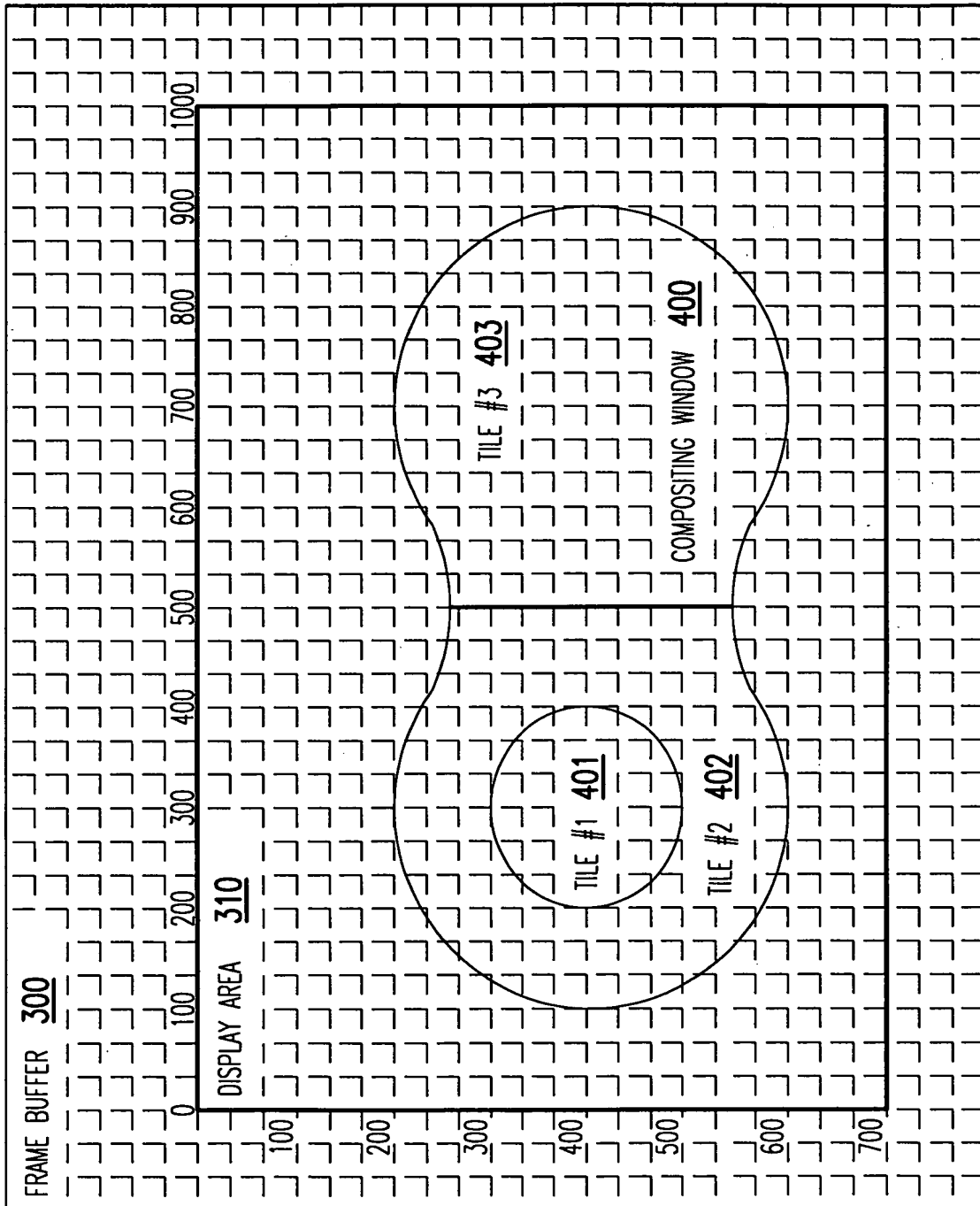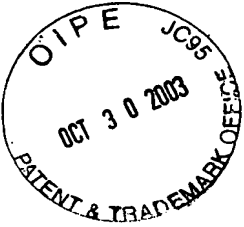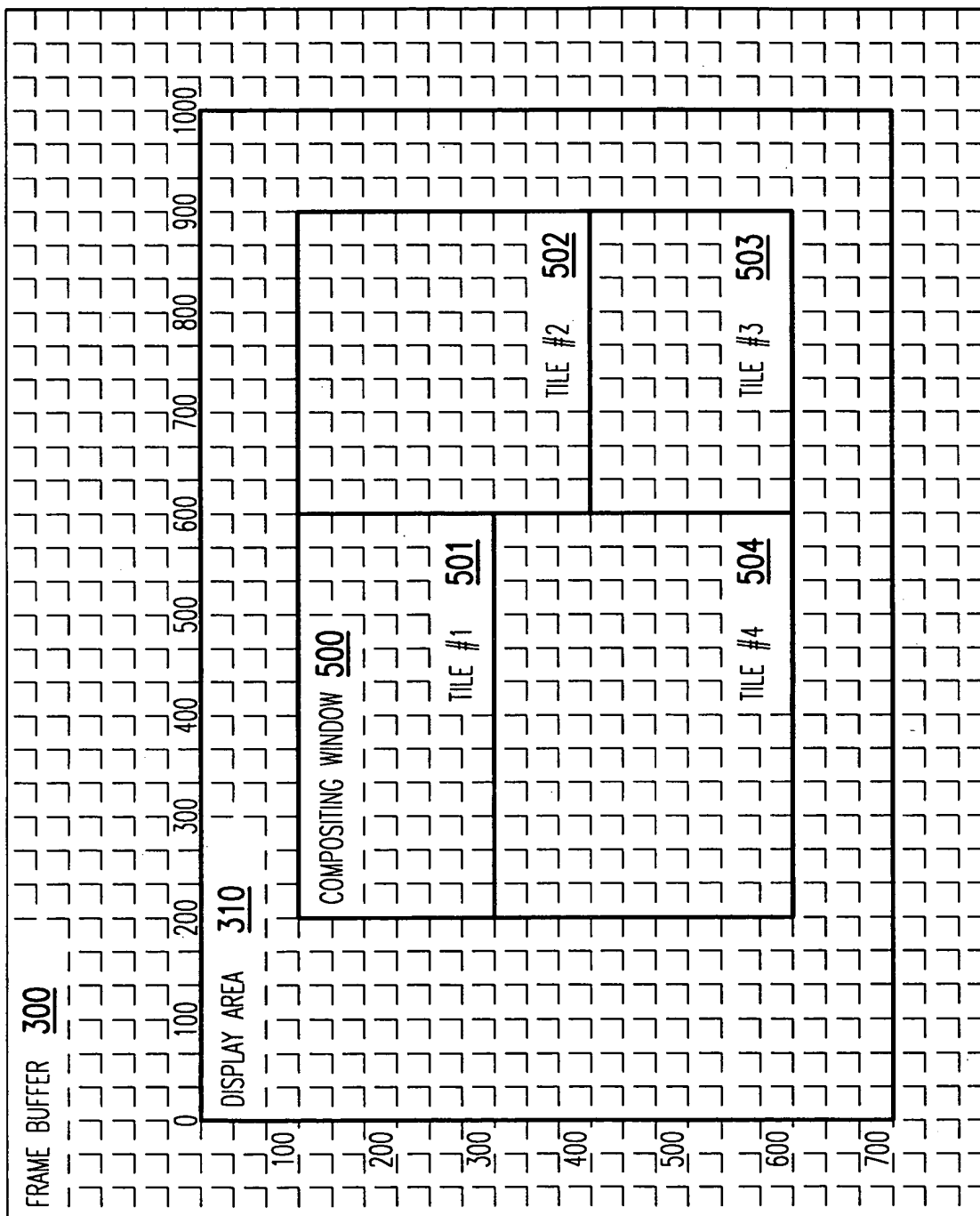FIG.3

FIG.4

FIG.5

602

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OBTAIN, FROM THE TILE PATTERN LIBRARY,
AN IDEX CODE THAT IDENTIFIES THE CHOSEN TILE PATTERN
WHEREIN THE INDEX CODE MINIMIZES THE AMOUNT OF DATA NEEDED TO CONVEY
THE PARAMETERS THAT DEFINE THE COMPOSITING WINDOW AND
THE PARAMETERS THAT DEFINE EACH OF THE TILES
```
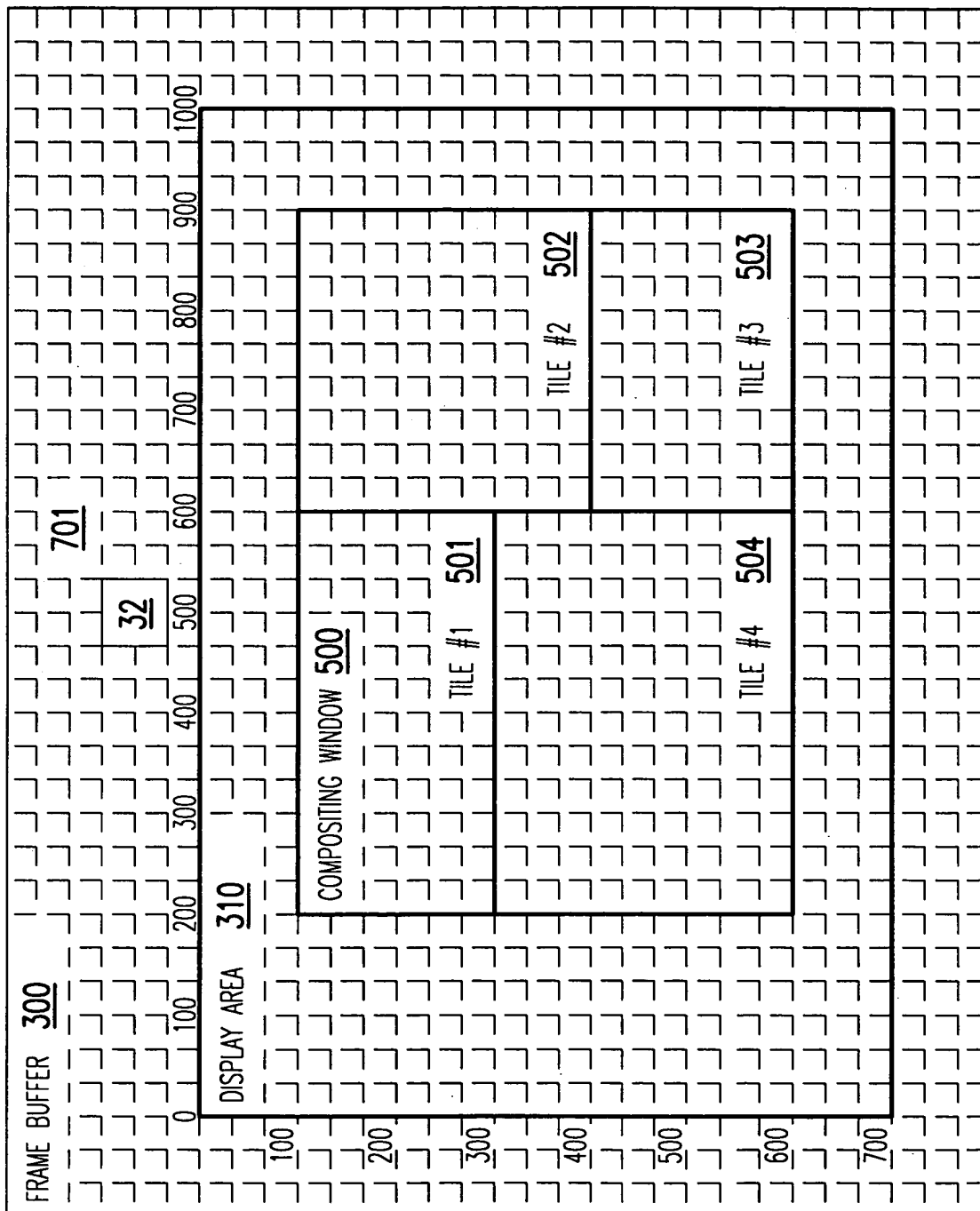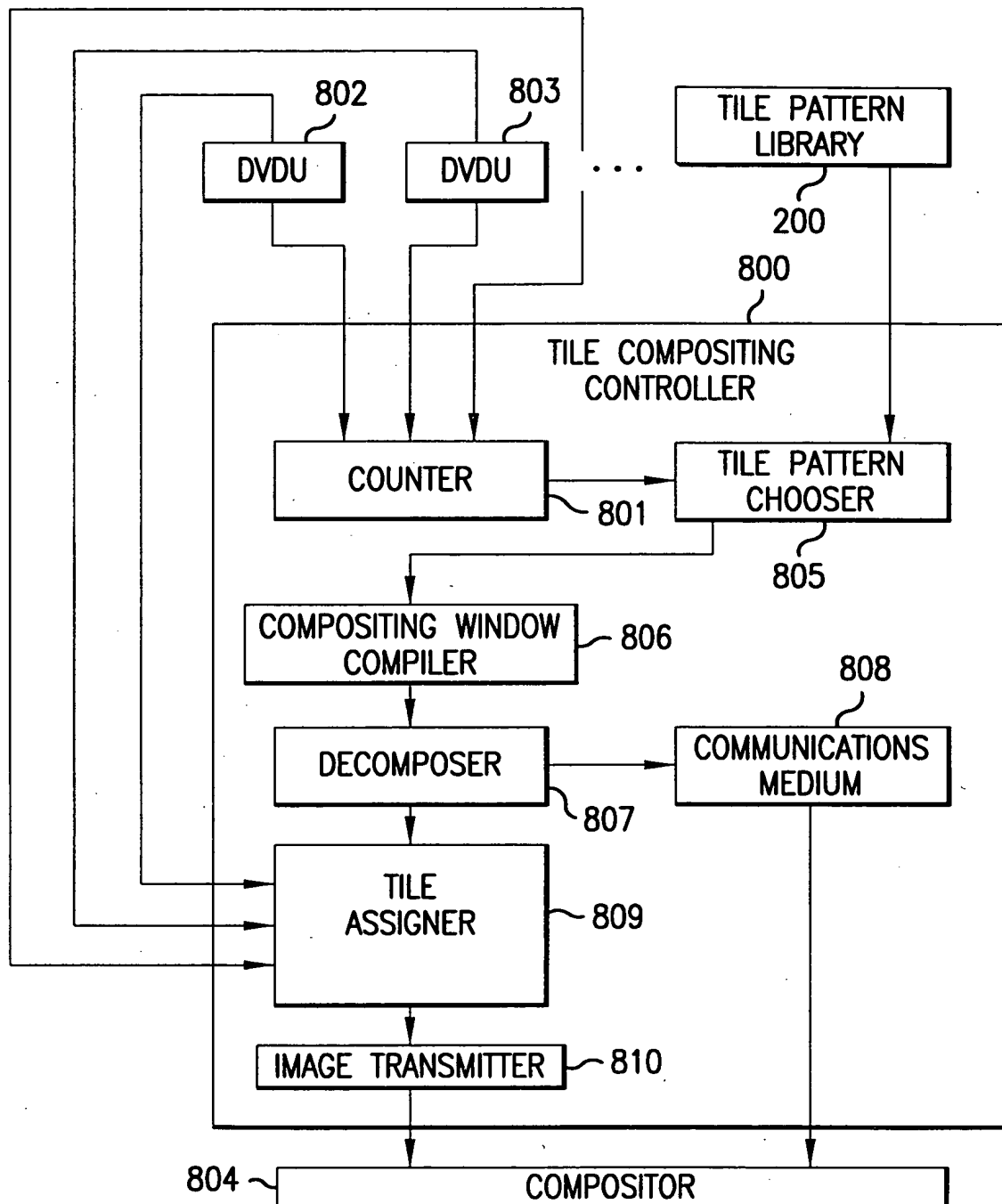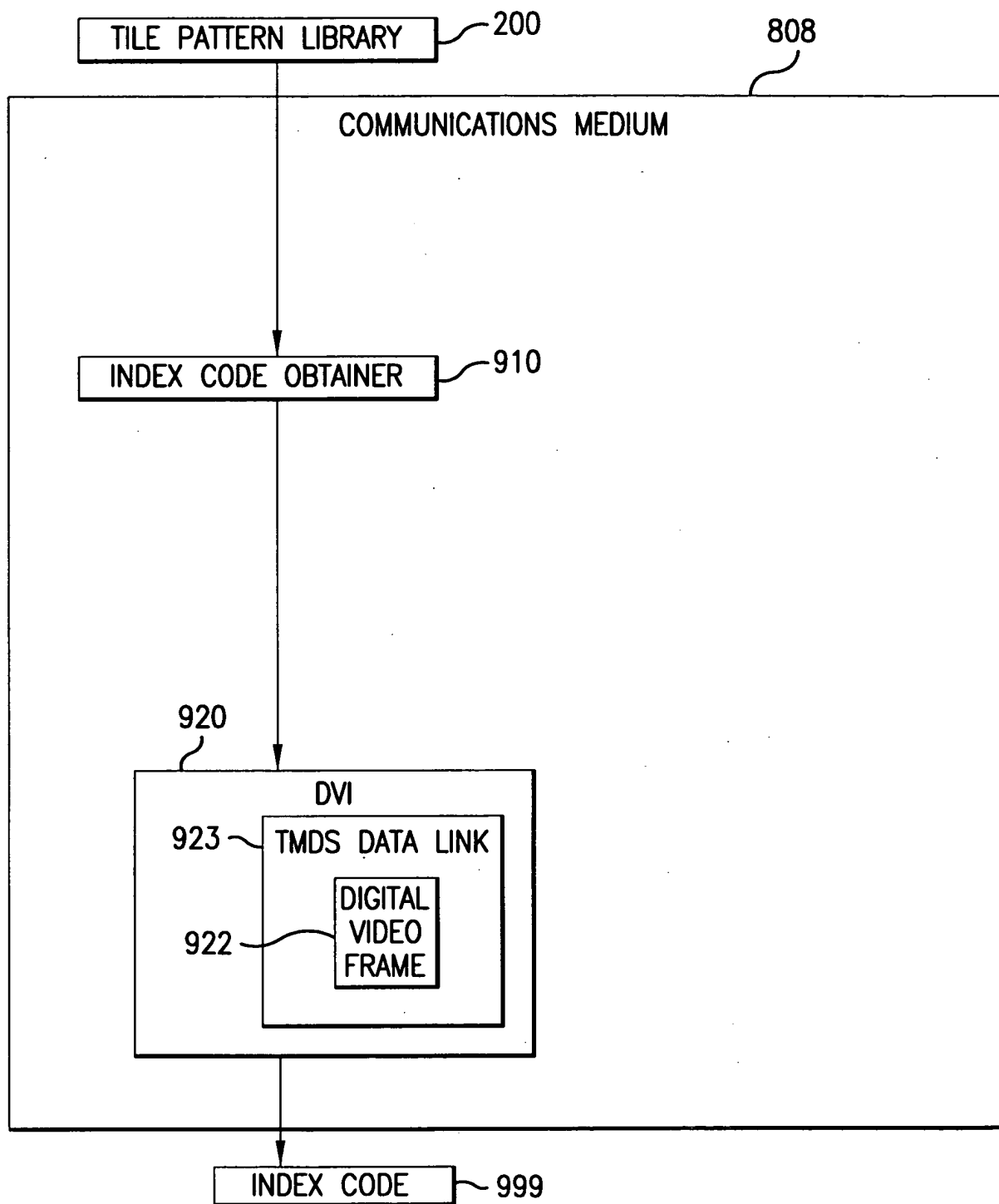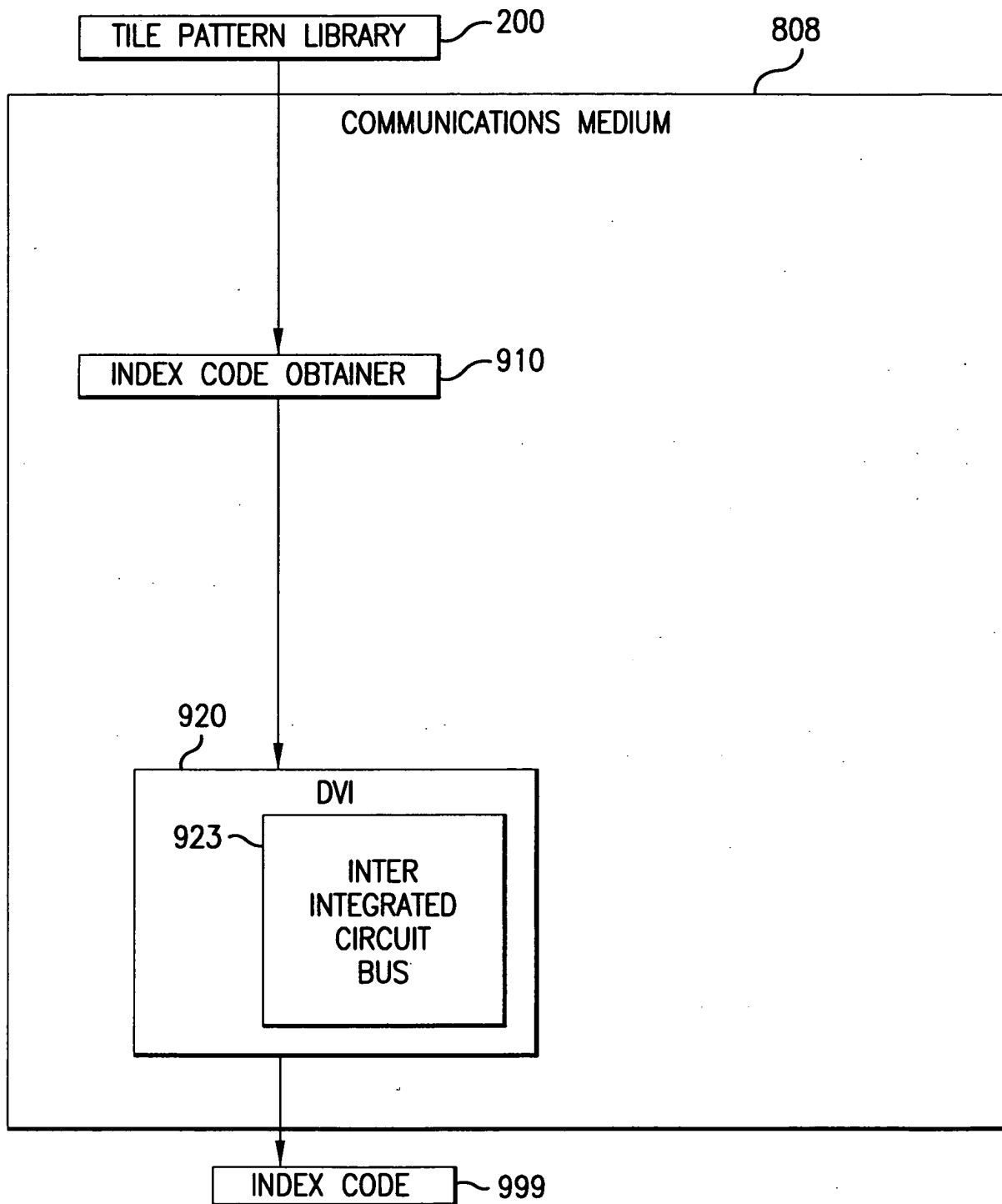
FIG.6

FIG.7

FIG.8

TILE PATTERN LIBRARY — 200

808

COMMUNICATIONS MEDIUM

INDEX CODE OBTAINER — 910

920

DVI

923 — TMDS DATA LINK

922 — DIGITAL VIDEO FRAME

INDEX CODE — 999

FIG.9A

TILE PATTERN LIBRARY	⌐200

808

COMMUNICATIONS MEDIUM

INDEX CODE OBTAINER	⌐910

920

DVI

923⌐

INTER
INTEGRATED
CIRCUIT
BUS

INDEX CODE	～999

FIG.9B

FIG.10